Hydric Soils: Hydric soils are defined in the manual as "soils that are saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions in the upper part." Field indicators include color, mottling, gleying, and sulfidic odor.

Wetland Hydrology: The wetland hydrology criterion is often the most difficult to determine. Typically, the presence of water for a week or more during the growing season creates anaerobic conditions. Anaerobic conditions lead to the prevalence of wetland plants. Morphological adaptations of plants, driftlines and watermarks are examples of wetland hydrology field indicators.

RESULTS AND DISCUSSION

STUDY AREA

The study area is located within the Spartan Meadows Golf Course between Randall Road and Elgin Community College. CBBEL identified five wetlands and five waters of the U.S. within the study area (Exhibit 7). In our opinion, the identified wetlands and waters of the U.S. will be regulated under Section 404 of the Clean Water Act because they are either directly contiguous with or located within the 100-year floodplain of Otter Creek. Regardless of federal jurisdictional status, the identified wetlands and waters of the U.S. are regulated under the Kane County Stormwater Ordinance and Technical Manual (Ordinance; revised October 9, 2001; effective January 1, 2002). The following table briefly summarizes the delineated areas.

DELINEATED AREA	DATA POINT	TYPE	SIZE ¹ (on-site)	FQI²	COE BUFFER WIDTH ³	KANE COUNTY BUFFER WIDTH ⁴
Waters of the U.S. 1	1A	Otter Creek	±1.0 acre	N/A	50 feet	To Be Determined
Waters of the U.S. 2	3A	Open water pond	±0.5 асге	N/A	30 feet	To Be Determined
Waters of the U.S. 3	8A	Open water pond	±1.1 acres	N/A	50 feet	To Be Determined
Waters of the U.S. 4	6A .	Open water pond	±0.4 acre	N/A	30 feet	To Be Determined
Waters of the U.S. 5	10A	Open water detention pond with wetland fringe	±1.5 acre	14.1 (wetland fringe)	50 feet	To Be Determined
Wetland 1	2A	Wetland swale	±0.1 acre	11.2	Not required	Not required
Wetland 2	4A	Wetland fringe	±0.4 acre	8.7	30 feet	15 feet
Wetland 3	7A	Wetland fringe	±0.2 acre	6.5	Not required	Not required
Wetland 4	5A	Wetland fringe	±0.1 acre	4,9	Not required	Not required
Wetland 5	9A	Scrub/shrub	±0.2 acre	5.7	To Be Determined	50 feet

Christopher B. Burke Engineering West, Ltd.

Crawford, Murphy & Tilly, Inc. Spartan Drive Extension - Phase 2



SOURCE: AERIAL PHOTOGRAPH AIRPHOTOUSA SPRING, 2008

SCALE: 1" = 600'

CLIENT	ELGIN COMMUNITY COLLEGE	TITLE	DWN.	LJL	CHKD.	KEM
	1700 SPARTAN DRIVE ELGIN, ILLINOIS (847) 697-1000	PARKING LOT EXPANSION	JOB#	10-0004		\bigwedge_{N}
A	WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201	AERIAL PHO	TACE) A DLI		DATE 03-18-2010
WBK	St. Charles, Illinois 60174 (630) 443-7755	AERIAL PRO	IVOI			EXHIBIT 6

1 Salix interior -5 OBL Nt Tree BLACK WILLOW 4 Salix nigra -5 OBL Nt Tree BLACK WILLOW 0 SOLANUM DULCAMARA 0 FAC Ad W-Vine BITTERSWEET NI 1 Typha latifolia -5 OBL Nt P-Forb BROAD-LEAVED C

Wetland 2

Wetland 2, characterized at data point 4A, is a wetland fringe located adjacent to Otter Creek (Exhibit 8). The ±0.4 acre wetland is dominated by reed canary grass, narrowleaved cattail, lake sedge (Carex lacustris), red-rooted spike rush (Eleocharis erythropoda) and stinging nettle (Urtica dioica). Positive wetland hydrology was indicated by saturated soils and areas of inundation. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA 12 NATIVE SPECIES 19 Total Species 2.5 NATIVE MEAN C 1.6 W/Adventives 8.7 NATIVE FQI 6.9 W/Adventives -3.6 NATIVE MEAN W -2.7 W/Adventives AVG: Fac. Wetland (+)	Native Tree Shrub W-Vine H-Vine P-Forb A-Forb P-Grass A-Grass P-Sedge A-Sedge Cryptogam	12 1 0 0 6 0 1 0 0 3	63.2% 5.3% 5.3% 0.0% 0.0% 31.6% 5.3% 0.0% 5.3% 0.0% 0.0% 0.0%	A~Forb P~Grass A~Grass P~Sedge	0 0.0% 1 5.3% 0 0.0% 0 0.0% 3 15.8% 0 0.0% 3 15.8% 0 0.0% 0 0.0%
C SCIENTIFIC NAME O Acer negundo 4 Alisma subcordatum 6 Carex lacustris 2 Carex vulpinoidea 2 Eleocharis erythropoda 6 HORDEUM JUBATUM 4 JUNCUS dudleyi 5 Lycopus americanus 6 LYTHRUM SALICARIA 7 PHALARIS ARUNDINACEA 7 POA PRATENSIS 7 Polygonum pensylvanicum 8 ROSA MULTIFLORA 9 RUMEX CRISPUS 4 Sagittaria latifolia 1 Salix interior 1 Solidago altissima 1 Typha angustifolia 0 URTICA DIOICA		-2 -5 -5 -5 -5 -1 0 -5 -4 1 -4 3 -5 -5 -3 -4 -5 -3 -4 -5 -4 -5 -4 -5 -4 -5 -4 -5 -4 -5 -4 -5 -4 -5 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4 -4	WETNESS FACW- OBL OBL OBL FAC+ (FAC) OBL FACW+ FACW+ FACW+ FACU FACH OBL OBL OBL FACH OBL OBL FACH OBL	Nt P-Sedge	BOX ELDER COMMON WATER PLANTAIN COMMON LAKE SEDGE BROWN FOX SEDGE RED-ROOTED SPIKE RUSH SQUIRREL-TAIL GRASS DUDLEY'S RUSH COMMON WATER HOREHOUND PURPLE LOOSESTRIFE REED CANARY GRASS KENTUCKY BLUE GRASS PINKWEED MUTTIFLORA ROSE CURLY DOCK COMMON ARROWHEAD SANDBAR WILLOW TALL GOLDENROD

Wetland 3

Wetland 3, characterized at data point 7A, is a wetland fringe of a pond (Exhibit 7). This ±0.2 acre wetland is dominated by reed canary grass, common arrowhead and redrooted spike rush. Positive wetland hydrology was indicated by inundation near the center of the wetland and saturated soils around the perimeter. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA 6 NATIVE SPECIES 8 Total Species 2.7 NATIVE MEAN C 2.0 W/Adventives 6.5 NATIVE FQI 5.7 W/Adventives -2.8 NATIVE MEAN W -2.5 W/Adventives AVG: Fac. Wetland	Native Tree Shrub W-Vine H-Vine P-Forb A-Forb P-Grass A-Grass F-Sedge A-Sedge	6 0 0 0 5 0 0 0 0 0	75.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	Advention Tree Shrub W-Vine H-Vine P-Forb B-Forb A-Forb P-Grass A-Grass P-Sedge A-Sedge	0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0.0% 0 0.0%	
C SCIENTIFIC NAME 4 Alisma subcordatum 2 Eleocharis erythropoda 4 Juncus dudleyi 0 PHALARIS ARUNDINACEA 0 POA PRATENSIS 4 Sagittaria latifolia 1 Solidago altissima 1 Typha angustifolia	Cryptogam	-5 -5 0 -4 1 -5	0.0% WETNESS OBL OBL [FAC] FACW+ FAC- OBL FACU OBL	Nt P-Sedge	COMMON NAME COMMON WATER PLANTA RED-ROOTED SPIKE RU DUDLEY'S RUSH REED CANARY GRASS KENTUCKY BLUE GRASS COMMON ARROWHEAD TALL GOLDENROD NARROW-LEAVED CATTA	SH

Wetland 4

Wetland 4, characterized at data point 5A, is a wetland fringe located adjacent to an unnamed tributary of Otter Creek (Exhibit 7). This ±0.1 acre wetland is dominated by reed canary grass, common arrowhead, narrow-leaved cattail, common water plantain (Alisma subcordatum) and knee grass (Panicum dichotomiflorum). Positive wetland hydrology was indicated by the presence of surface water. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

~						
LORISTIC QUALITY DATA 6 NATIVE SPECIES 8 Total Species 2.0 NATIVE MEAN C 1.5 W/Adventives 4.9 NATIVE FQI 4.2 W/Adventives -4.5 NATIVE MEAN W -3.7 W/Adventives AVG: Fac. Wetland (+)	Native Tree Shrub W-Vine H-Vine P-Forb B-Forb A-Forb P-Grass A-Grass P-Sedge	6 0 0 0 0 4 0 0 0	75.0% 0.0% 0.0% 0.0% 50.0% 0.0% 0.0% 0.0% 12.5%	Adventive Tree Shrub W-Vine H-Vine P-Forb A-Forb P-Grass A-Grass P-Sedge	0 0 0 0 0 0 0 0 2 0	25.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
C SCIENTIFIC NAME 4 Alisma subcordatum	P-Sedge A-Sedge Cryptogam	0 0 W -5	0.0% 0.0% WETNESS OBL	A-Sedge PHYSIOGNOMY Nt P-Forb	0	0.0% R PLANTAIN
2 Eleocharis erythropoda 0 Panicum dichotomiflorum 0 PHALARIS ARUNDINACEA 0 POA PRATENSIS 4 Sagittaria latifolia 1 Typha angustifolia 1 Typha latifolia		-2 -4 1 -5 -5	FACW- FACW+ FAC- OBL OBL	Nt A-Grass Ad P-Grass Ad P-Grass Nt P-Forb Nt P-Forb Nt P-Forb	KNEE GRASS REED CANARY KENTUCKY BL COMMON ARRO NARROW-LEAV BROAD-LEAVE	UE GRASS WHEAD ED CATTAIL

Wetland 5

Wetland 5, characterized at data point 9A, is located northeast of Otter Creek and extends off-site (Exhibit 7). This wetland is dominated by reed canary grass, stinging nettle and tall goldenrod (Solidago altissima). Positive wetland hydrology was indicated

The following lists identified plants with the calculated native mean C-value:

	FLORISTIC QUALITY DATA	Native	6	75.0%	Adventi	ve	2	25.0%
	6 NATIVE SPECIES	Tree	ŏ	0.0%	Tree		0	0.0%
		Shrub	Q.	0.0%	Shrub		Ó	0.0%
	8 Total Species	W-Vine	ő	0.0%	W-Vine		0	0.0%
	2.7 NATIVE MEAN C			0.0%	H-Vine		0	0.0%
	2.0 W/Adventives	H-Vine	0		P-Forb		n	0.0%
	6.5 NATIVE FQI	P-Forb	5	62.5%			0	0.0%
	5.7 W/Adventives	B-Forb	0	0.0%	B-Forb		0	
	-2.8 NATIVE MEAN W	A-Forb	0	0.0%	A-Forb		0	0.0%
	-2.5 W/Adventives	P-Grass	0	0.0%	P∽Grass		2	25.0%
	AVG: Fac. Wetland	A-Grass	0	0.0%	A-Grass		0	0.0%
		P-Sedge	1	12.5%	P-Sedge		0	0.0%
		A-Sedge	0	0.0%	A-Sedge		0	0.0%
		Cryptogam	Ö	0.0%	_			
		Cryptogam	•	0.00				
~	SCIENTIFIC NAME		W	WETNESS	PHYSIOGNOMY	COMMON	NAM	E
	Alisma subcordatum		• • •	OBL	Nt P-Forb	COMMON	WAT	ER PLANTAIN
			_	OBL	Nt P-Sedge	RED-ROO	OTED	SPIKE RUSH
	Eleocharis erythropoda		-	[FAC]	Nt P-Forb	DUDLEY	S R	USH
	Juncus dudleyi			•	Ad P-Grass			Y GRASS
0	PHALARIS ARUNDINACEA		_	FACW+				LUE GRASS
0	POA PRATENSIS			FAC-	Ad P-Grass			
4	Sagittaria latifolia		-5	OBL	Nt P-Forb			OWHEAD
1	Solidago altissima		3	FACU	Nt P-Forb	TALL G		
	Typha angustifolia		~5	OBL	Nt P-Forb	NARROW	-LEA	VED CATTAIL

Wetland 4

Wetland 4, characterized at data point 5A, is a wetland fringe located adjacent to an unnamed tributary of Otter Creek (Exhibit 7). This ±0.1 acre wetland is dominated by reed canary grass, common arrowhead, narrow-leaved cattail, common water plantain (Alisma subcordatum) and knee grass (Panicum dichotomiflorum). Positive wetland hydrology was indicated by the presence of surface water. Soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

· -						
LORISTIC QUALITY DATA 6 NATIVE SPECIES 8 Total Species 2.0 NATIVE MEAN C 1.5 W/Adventives 4.9 NATIVE FQI 4.2 W/Adventives -4.5 NATIVE MEAN W -3.7 W/Adventives AVG: Fac. Wetland (+)	Native Tree Shrub W-Vine H-Vine P-Forb B-Forb A-Forb P-Grass A-Grass P-Sedge A-Sedge Cryptogam	6 0 0 0 4 0 0 0 1 1	75.0% 0.0% 0.0% 0.0% 0.0% 50.0% 0.0% 0.0%	P-Sedge A-Sedge	0 0 0 0 0 0 0	25.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%
C SCIENTIFIC NAME 4 Alisma subcordatum 2 Eleocharis erythropoda 0 Panicum dichotomiflorum 0 PHALARIS ARUNDINACEA 0 POA PRATENSIS 4 Sagittaria latifolia 1 Typha angustifolia 1 Typha latifolia		-5 -5 -2 -4 1 -5	WETNESS OBL OBL FACW+ FAC- OBL OBL OBL		COMMON WAT RED-ROOTE! KNEE GRASS REED CANAL KENTUCKY I COMMON ARI NARROW-LEE	TER PLANTAIN D SPIKE RUSH S RY GRASS BLUE GRASS

Wetland 5

Wetland 5, characterized at data point 9A, is located northeast of Otter Creek and extends off-site (Exhibit 7). This wetland is dominated by reed canary grass, stinging nettle and tall goldenrod (Solidago altissima). Positive wetland hydrology was indicated by saturated soils. Soils were mapped and field verified as Drummer silty clay loam, a poorly drained hydric soil.

The following lists identified plants with the calculated native mean C-value:

FLORISTIC QUALITY DATA 6 NATIVE SPECIES 9 Total Species 2.3 NATIVE MEAN C 1.6 W/Adventives 5.7 NATIVE FQI 4.7 W/Adventives -1.3 NATIVE MEAN W -0.9 W/Adventives AVG: Faculative (+)	Native Tree Shrub W-Vine H-Vine P-Forb A-Forb A-Grass P-Sedge A-Sedge Cryptogam	6 1 0 0 4 0 0 0 0 0	66.7% 11.1% 11.1% 0.0% 0.0% 44.4% 0.0% 0.0% 0.0% 0.0% 0.	H-Vine P-Forb B-Forb A-Forb P-Grass A-Grass P-Sedge	0 0 0 0 1 1 0 1	0.0% 11.1% 0.0% 0.0%
C SCIENTIFIC NAME 4 Apocynum cannabinum 0 ARCTIUM MINUS 2 Helianthus grosseserratus 0 PHALARIS ARUNDINACEA 2 Populus deltoides 1 Salix interior 1 Solidago altissima 4 Solidago gigantea 0 URTICA DIOICA	.	0 5 -2 -4 -1 -5 3 -3	WETNESS FAC UPL FACW- FACW+ FAC+ OBL FACU FACW FACW FACW	Nt P-Forb	REED CAN EASTERN SANDBAR TALL GOI LATE GOI	EMP SURDOCK I SUNFLOWER NARY GRASS COTTONWOOD WILLOW LDENROD

IDENTIFIED WATERS OF THE U.S.

Waters of the U.S. are defined as the ordinary high water mark in non-tidal waters, provided the jurisdiction is not extended by the presence of wetlands. The term "ordinary high water mark" (OHWM) refers to the line established by fluctuations of water. These fluctuations can be indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter and debris. The following is a brief description of the identified waters of the U.S.

Waters of the U.S. 1

Waters of the U.S. 1, characterized at data point 1A, represents Otter Creek (Exhibit 7). Otter Creek flows along the northern study area boundary and contains a small unnamed tributary. The unvegetated creek and tributary varies from five to fifteen feet wide and was inundated with various depths of water. The creek bed consisted of a mixture of silt and gravel. Soils were mapped and field verified along the banks of the creek as Houghton muck, a very poorly drained hydric soil.

Waters of the U.S. 2, 3 and 4

Waters of the U.S. 2, 3 and 4, characterized at data points 3A, 8A and 6A, respectively, are open water ponds located on the golf course (Exhibit 7). The ponds were unvegetated and were surrounded by manicured fairway turf grass. The ponds were inundated with more than 24 inches of water and soils were mapped and field verified as Houghton muck, a very poorly drained hydric soil.

oplicant Name: City of Elgin state: IL County: Kane Date: 6/18/02	Project Nar Section: 2 Determined	21	Orive Extension Township: mack/Julie Gar	41N	Project Number: 02-914 Range: 8E
Plot Number: 3A					
lo Normal Circumstances exist on the site?	Yes C	omment:			
is the site significantly disturbed (Atypical Situation)?	No C	omment:			
Is the area a potential Problem Area?	No C	Comment:			
VEGETATION Scientific Name Common Name UNVEGETATED	•		Stratum		Indicator Status
Percent of Dominant Species that are OBL, FACW or FAC (Remarks: Hydrophytic Vegetation Present? No Basi): 0 %	Other In	dicators:	
HYDROLOGY Wetland Hydrology Primary Indicators:		Welland Hyd	drology Secon	ndary Indicators	s (2 or more required):
✓ Inundated Depth of standing water: >36"		Oxidize	d Root Channe	ls in Upper 12 ir	nches
☐ Saturated Soils Depth To Saturated Soil:		☐ Water-S	Stained Leaves	•	
Saturated In Upper 12 Inches		✓ Local S	oil Survey Data	3	
☐ Water Marks		☐ FAC-N€	eutral Test		
☐ Drift Lines		Other (E	Explain in Rem	arks)	
Sediment Deposits					
Drainage Patterns In Wetlands					
Remarks:					
Netland Hydrology Present?: Yes Bas	is:				
SOIL					
Series And Phase: Houghton muck		Map Sym			
Drainage Class: Very poorly drained			łydric inclusio		
Taxonomy (Subgroup): Typic medisaprists		Field C	Observations (Confirm Mappe	ed Type
Depth Horizon Matrix Color Mottle Colo 0-12 N2/0	r Mottle Ab	undance Mot	tle Contrast	Texture, Concr sapric material;	retions, Structure, Etc. medium granular structure
Hydric Soil Indicators:					
☑ Histosof		Concretion			
Histic Epipedon			anic Content ir	n Surface Layer	in Sandy Soils
		Organic :			

oplicant Name: City of Elgin state: IL County: Kane Date: 6/18/02			Project Name: Spartan Drive Extension Section: 21 Township: 41N Determined By: Kari Womack/Julie Gangloff	Project Number: Range: 8E	02-914
Aquic Moisture Regime Reducing Conditions			✓ Listed on Local Hydric Soils List ✓ Listed on National Hydric Soils List		
Gleyed Or Low Chroma Color	S		Other (Explain In Remarks)		
Remarks:					
lydric Soils Present? Yes		Basis:			
Hydrophytic Vegetation Present?	No	Basis:			
etland Hydrology Present?:	Yes	Basis:			
nydric Soils Present?	Yes	Basis:			
"etland Determination: Nonwetland					
omments: THE SAMPLING POINT I	REPRESENT	S A WATE	RS OF THE U.S.		
Plot Number: 3A	•				

oplicant Name: City of Elgin State: IL County: Kane Date: 6/18/02	Project N Section: Determin	21 Township:	41N Range: 8E
Plot Number: 3B			
o Normal Circumstances exist on the site?	Yes	Comment:	
is the site significantly disturbed (Atypical Situation)?	No	Comment:	
Is the area a potential Problem Area?	No	Comment:	
VEGETATION			
Scientific Name Common Nam		Stratum	Indicator Status FAC-
POA PRATENSIS KENTUCKY E	BLUE GRASS	Herb	PAC-
Percent of Dominant Species that are OBL, FACW or FAC	C (excluding FA	(C-): 0 % Other I	ndicators:
lemarks:			
lydrophytic Vegetation Present? No Ba	asis:		
HYDROLOGY		The state of the s	
Netland Hydrology Primary Indicators:		Wetland Hydrology Seco	ndary Indicators (2 or more required):
		Oxidized Root Channe	els in Upper 12 Inches
		☐ Water-Stained Leave	
Saturated Soils Depth To Saturated Soil: >12"		Local Soil Survey Dat	
Saturated in Upper 12 Inches		☐ FAC-Neutral Test	
Water Marks		Other (Explain in Ren	narks)
Drift Lines	,		,
Sediment Deposits			
Drainage Patterns In Wetlands			
Remarks:			
Wetland Hydrology Present?: No B	lasis:		
SOIL			
Series And Phase: Houghton muck		Map Symbol: 103	
Drainage Class: Very poorly drained		Mapped Hydric Inclus	
Taxonomy (Subgroup): Typic medisaprists		Field Observations	Confirm Mapped Type
Depth Horizon Matrix Color Mottle Co 0-12 N2/0	olor Mottle	Abundance Mottle Contrast	Texture, Concretions, Structure, Etc. sapric material; medium granular structure
Hydric Soil Indicators:			
✓ Histosol		Concretions	
Histic Epipedon		High Organic Content	in Surface Layer in Sandy Soils
- · ·			
Sulfidic Odor		Organic Streaking in S	andy Soils



oplicant Name: City of Elgin Cate: IL County: Kane Date: 6/18/02		Project Name: Spartan Drive Extension Section: 21 Township: 41N Determined By: Kari Womack/Julie Gangloff	Project Number: 02-914 Range: 8E	
Reducing Conditions ✓ Gleyed Or Low Chron	na Colors		✓ Listed on National Hydric Soils List ☐ Other (Explain In Remarks)	
temarks:				
Hydric Soils Present?	Yes	Basis:		
ydrophytic Vegetation Present	? No	Basis:		
Wetland Hydrology Present?:	No	Basis:		
ydric Soils Present?	Yes	Basis:		
Wetland Determination: Nonw	elland			
omments: ALL CRITERIA A ot Number: 38	RE NOT PRESENT			

oplicant Name: City of Eigin state: IL County: Kane Pate: 6/18/02	Project N Section: Determin	21	tan Drive Extension Township: ri Womack/Julie Ga	41N Range: 8E
Plot Number: 4A				
o Normal Circumstances exist on the site?	Yes	Comment:		
is the site significantly disturbed (Atypical Situation)?	No	Comment:		
is the area a potential Problem Area?	No	Comment:		
VEGETATION				
Scientific Name Common Na	me		Stratum	Indicator Status
	D SPIKE RUSH	1	Herb	OBL
URTICA DIOICA STINGING N	ETTLE		Herb	FAC+
PHALARIS ARUNDINACEA REED CANA	RY GRASS		Herb	FACW+
• • • • • • • • • • • • • • • • • • • •	EAVED CATTAI	L	Herb	OBL
Carex lacustris COMMON D	AKE SEDGE		Herb	OBĻ
Percent of Dominant Species that are OBL, FACW or FA Remarks:	C (excluding Fa	AC-): 100) % Other I	ndicators:
Hydrophytic Vegetation Present? Yes B	asis:			
HYDROLOGY				to the control on many varieties div
Wetland Hydrology Primary Indicators:	•			ndary Indicators (2 or more required):
✓ Inundated Depth of standing water: 5"		□ 0x	idized Root Chann	els in Upper 12 Inches
Saturated Soils Depth To Saturated Soil:		□ W:	ater-Stained Leave	8
Saturated In Upper 12 Inches		V Lo	cal Soil Survey Dat	a
_			C-Neutral Test	
Water Marks			her (Explain in Ren	narks)
Drift Lines		ال ال	nor (Explain at Not	,
Sediment Deposits				
Drainage Patterns In Wetlands				
Remarks:				
Wetland Hydrology Present?: Yes E	Basis:			
SOIL				
Series And Phase: Houghton muck		Мар	Symbol: 103	
Drainage Class: Very poorly drained		Марі	oed Hydric Inclusi	on:
_				Confirm Mapped Type
Taxonomy (Subgroup): Typic medisaprists Depth Horizon Matrix Color Mottle C 0-12 N2/0	olor Mottle A	Abundance		Texture, Concretions, Structure, Etc. saoric material; medium granular structure
Hydric Soil Indicators:				
		Con	cretions	
✓ Histosol				



oplicant Name: City of Elgin State: IL County: Kane Date: 6/18/02			Project Name: Spartan Drive Extension Project Number: 02-914 Section: 21 Township: 41N Range: 8E Determined By: Kari Womack/Julie Gangloff				
Histic Epipedon			☐ High Organic Content in Surface Layer in Sandy Solls				
Sulfidic Odor			Organic Streaking in Sandy Soils				
Aquic Moisture Regime			☑ Listed on Local Hydric Soils List				
Reducing Conditions			Listed on National Hydric Soils List				
Gleyed Or Low Chroma Colors			Other (Explain in Remarks)				
Remarks:							
'lydric Soils Present? Ye	9	Basis:					
Hydrophytic Vegetation Present?	Yes	Basis:					
Wetland Hydrology Present?:	Yes	Basis:					
ydric Solis Present?	Yes	Basis:					
Wetland Determination: Wetland							
omments: ALL CRITERIA ARE F	RESENT		•				
riot Number: 4A							

Plot Number: 4B 30 Normal Circumstances exist on the site? Yes s the site significantly disturbed (Atypical Situation)? No is the area a potential Problem Area? No VEGETATION Scientific Name Common Name POA PRATENSIS KENTUCKY BLUE GRASS Percent of Dominant Species that are OBL, FACW or FAC (excluding Famarks: Ilydrophytic Vegetation Present? No Basis: HYDROLOGY Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil; >12" Saturated In Upper 12 Inches Water Marks Drift Lines	Comment: Comment: Comment:
s the site significantly disturbed (Atypical Situation)? No Is the area a potential Problem Area? No /EGETATION Scientific Name Common Name POA PRATENSIS KENTUCKY BLUE GRASS Percent of Dominant Species that are OBL, FACW or FAC (excluding Factorial Remarks: Industry of Industry Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	Comment:
Is the area a potential Problem Area? VEGETATION Scientific Name POA PRATENSIS Percent of Dominant Species that are OBL, FACW or FAC (excluding Famarks: Iydrophytic Vegetation Present? No Basis: HYDROLOGY Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	
/EGETATION Scientific Name Common Name POA PRATENSIS KENTUCKY BLUE GRASS Percent of Dominant Species that are OBL, FACW or FAC (excluding Farmarks: lydrophytic Vegetation Present? No Basis: HYDROLOGY Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	Comment:
Scientific Name POA PRATENSIS RENTUCKY BLUE GRASS Percent of Dominant Species that are OBL, FACW or FAC (excluding Farmarks: Ilydrophytic Vegetation Present? No Basis: HYDROLOGY Netland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	
POA PRATENSIS KENTUCKY BLUE GRASS Percent of Dominant Species that are OBL, FACW or FAC (excluding Factoria) Remarks: Iydrophytic Vegetation Present? No Basis: HYDROLOGY Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	h. Verafor Otalor
Remarks: Hydrophytic Vegetation Present? No Basis: HYDROLOGY Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	Stratum Indicator Status Herb FAC-
Vetland Hydrology Primary Indicators: Inundated Depth of standing water: Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	FAC-): 0 % Other Indicators:
☐ Inundated Depth of standing water: ☐ Saturated Soils Depth To Saturated Soil: >12" ☐ Saturated In Upper 12 Inches ☐ Water Marks ☐ Drift Lines	
Saturated Soils Depth To Saturated Soil: >12" Saturated In Upper 12 Inches Water Marks Drift Lines	Wetland Hydrology Secondary Indicators (2 or more required):
Saturated In Upper 12 Inches Water Marks Drift Lines	Oxidized Root Channels in Upper 12 Inches
Water Marks Drift Lines	Water-Stained Leaves
Drift Lines	Local Soil Survey Data
	FAC-Neutral Test
	Other (Explain in Remarks)
Sediment Deposits	
☐ Drainage Patterns In Wetlands	
Remarks:	
Wetland Hydrology Present?: No Basis:	
30IL	
Series And Phase: Houghton muck	Map Symbol: 103
Orainage Class: Very poorly drained	Mapped Hydric Inclusion:
Taxonomy (Subgroup): Typic medisaprists	▼ Field Observations Confirm Mapped Type
Depth Horizon Matrix Color Mottle Color Mottle 2 0-12 N2/0	Abundance Mottle Contrast Texture, Concretions, Structure, Etc. sapric material; medium fine granular
Hydric Soil Indicators:	
✓ Histosol	Concretions
Histic Epipedon	High Organic Content in Surface Layer in Sandy Soils
Sulfidic Odor	Organic Streaking in Sandy Soils
Aquic Moisture Regime	☑ Listed on Local Hydric Soils List



oplicant Name: City of Elgin State: IL County: Kane Date: 6/18/02			Project Name: Spartan Drive Extension Section: 21 Township: 41N Determined By: Kari Womack/Julie Gangloff	Project Number: 02-9 Range: 8E	14
☐ Reducing Conditions ☑ Gleyed Or Low Chroma Cold	ors		✓ Listed on National Hydric Soils List ☐ Other (Explain In Remarks)		
lemarks:					
Hydric Soils Present? Yes		Basis:			
ydrophytic Vegetation Present?	No	Basis:			
Wetland Hydrology Present?:	No	Basis:			
ydric Soils Present?	Yes	Basis:			
Wetland Determination: Nonwetland					
omments: ALL CRITERIA ARE NO	T PRESENT				

ot Number:

oplicant Name: City of Elgin state: IL County: Kane Pate: 6/18/02	Project Name: Section: 21 Determined By	Township:	41N Range: 8E
Plot Number: 5A			
)o Normal Circumstances exist on the site?	Yes Com	ment:	
.s the site significantly disturbed (Atypical Situation)?	No Com	ment:	
Is the area a potential Problem Area?	No Com	ment:	
VEGETATION			
Scientific Name Common Na	ame	Stratum	Indicator Status
PHALARIS ARUNDINACEA REED CANA		Herb	FACW+
	RROWHEAD	Herb	OBL
	VATER PLANTAIN	Herb	OBL
Panicum dicholomiflorum KNEE GRAS		Herb	FACW-
Typha angustifolia NARROW-L	EAVED CATTAIL	Herb	OBL
Percent of Dominant Species that are OBL, FACW or FA	C (excluding FAC-):	100 % Other I	ndicators:
Remarks:			
Hydrophytic Vegetation Present? Yes B	lasis:		
Wetland Hydrology Primary Indicators: ✓ Inundated Depth of standing water: 12" ☐ Saturated Soils Depth To Saturated Soil: ☐ Saturated In Upper 12 Inches ☐ Water Marks ☐ Drift Lines ☐ Sediment Deposits ☐ Drainage Patterns in Wetlands Remarks: Wetland Hydrology Present?: Yes	<u>)</u> Basis:	Netland Hydrology Seco Oxidized Root Channe Water-Stained Leaves Local Soil Survey Dat FAC-Neutral Test Other (Explain in Ren	s a
SOIL		Map Symbol: 103	
Series And Phase: Houghton muck		Mapped Hydric Inclusi	ion:
Drainage Class: Very poorly drained			
Taxonomy (Subgroup): Typic medisaprists		Field Observations	
Depth Horizon Matrix Color Mottle C 0-12 N2/0	olor Mottle Abund	lance Mottle Contrast	Texture, Concretions, Structure, Etc. sapric material; medium fine granular
II 6-H Imdicators			
Hydric Soil Indicators:			



oplicant Name: City of Elgin			Project Name:	Spartan Drive Extension	n	Project Number:	02-914	
state: IL County: Kane			Section: 21	Township:	41N	Range: 8E		
Date: 6/18/02		Determined By: Kari Womack/Julie Gangloff						
Histic Epipedon	<u> </u>	<u> </u>		High Organic Content in	Surface Layer i	n Sandy Soils		
Sulfidic Odor				Organic Streaking in San	dy Solls			
Aquic Moisture Regime		✓ Listed on Local Hydric Soils List						
Reducing Conditions		✓ Listed on National Hydric Soils List						
☑ Gleyed Or Low Chroma Colors			Other (Explain In Remarks)					
Remarks:								
'lydric Soils Present? Y	es	Basis:						
Hydrophytic Vegetation Present?	Yes	Basis:						
Wetfand Hydrology Present?:	Yes	Basis:						
ydric Soils Present?	Yes	Basis:	·					
Wetland Determination: Wetland								
omments: THE AREA REPRES	ENTS A WETLA	ND ADJACI	ENT TO A TRIBU	JTARY OF OTTER CREE	EK.			
riot Number: 5A								

oplicant Name: City of Elgin state: IL County: Kane Pate: 6/18/02	Project N Section: Determin	21 Township: 41N	
Plot Number: 5B			
Io Normal Circumstances exist on the site?	Yes	Comment:	
is the site significantly disturbed (Atypical Situation)?	No	Comment:	
Is the area a potential Problem Area?	No	Comment:	
VEGETATION			
Scientific Name Common Name POA PRATENSIS KENTUCKY E	me BLUE GRASS	Stratum Herb	Indicator Status FAC-
Percent of Dominant Species that are OBL, FACW or FAC	(excluding F/	C-): 0 % Other Indica	tors:
Remarks: Raydrophytic Vegetation Present? No Ba	ısis;		
HYDROLOGY			
Vetland Hydrology Primary Indicators:		Wetland Hydrology Secondary	Indicators (2 or more required):
Inundated Depth of standing water:		Oxidized Root Channels in	Upper 12 Inches
Saturated Soils Depth To Saturated Soil: >15"		Water-Stained Leaves	
Saturated In Upper 12 Inches		Local Soil Survey Data	
Water Marks		☐ FAC-Neutral Test	
Drift Lines		Other (Explain in Remarks)	
Sediment Deposits			
Drainage Patterns In Wetlands			
Remarks:			
Wetland Hydrology Present?: No Ba	asis:		
30IL			
Series And Phase: Houghton muck		Map Symbol: 103	
Orainage Class: Very poorly drained		Mapped Hydric Inclusion:	
Taxonomy (Subgroup): Typic medisaprists		Field Observations Confi	irm Mapped Type
Depth Horizon Matrix Color Mottle Co 0-15 N2/0	ilor Mottle A		ure, Concretions, Structure, Etc. c material; medium fine granular
Hydric Soil Indicators:			
✓ Histosol		Concretions	
Histic Epipedon		High Organic Content in Surf	ace Layer in Sandy Soils
Sulfidic Odor		Organic Streaking in Sandy S	Soils

State: IL County: Kane			Project Name: Spartan Drive Extension Section: 21 Township: 41N Determined By: Karl Womack/Julie Gangloff	Project Number: 02-914 Range: 8E
Reducing Conditions Gleyed Or Low Chroma Col	ors		✓ Listed on National Hydric Soils List ☐ Other (Explain In Remarks)	
Hydric Soils Present? Yes		Basis:		·
ydrophytic Vegetation Present? Wetland Hydrology Present?: ydric Solls Present?	No No Yes	Basis: Basis: Basis:		
Wetland Determination: Nonwetland				

St Number: